Andrew Freistein 10/500,411

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NEWS	4	APR 04	STN AnaVist $500 visualization usage credit offered
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NEWS	6	MAY 11	KOREAPAT updates resume
NEWS	7	MAY 19	Derwent World Patents Index to be reloaded and enhanced
NEWS	8	MAY 30	IPC 8 Rolled-up Core codes added to CA/CAplus and USPATFULL/USPAT2
NEWS	9	MAY 30	The F-Term thesaurus is now available in CA/CAplus
NEWS	10	JUN 02	The first reclassification of IPC codes now complete in INPADOC
NEWS EXPRESS			FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005. V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT http://download.cas.org/express/v8.0-Discover/
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FILE 'HOME' ENTERED AT 13:15:05 ON 26 JUN 2006

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 13:15:14 ON 26 JUN 2006
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 25 JUN 2006 HIGHEST RN 889359-45-9
DICTIONARY FILE UPDATES: 25 JUN 2006 HIGHEST RN 889359-45-9

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*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                    *
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Structure search iteration limits have been increased. See HELP SLIMITS for details.

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http://www.cas.org/ONLINE/UG/regprops.html

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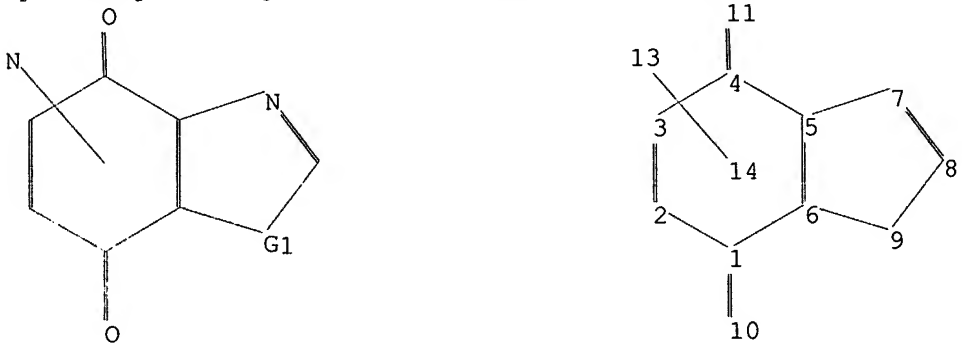

chain nodes :
10 11 13
ring nodes :
1 2 3 4 5 6 7 8 9
chain bonds :
1-10 4-11
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9
exact/norm bonds :

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1-2 1-6 1-10 2-3 3-4 4-5 4-11 5-6 5-7 6-9 7-8 8-9

G1:O,S

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS
11:CLASS 13:CLASS 14:CLASS

L1 STRUCTURE UPLOADED

=> s l1
SAMPLE SEARCH INITIATED 13:15:32 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 151 TO ITERATE

100.0% PROCESSED 151 ITERATIONS 15 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 2283 TO 3757
PROJECTED ANSWERS: 68 TO 532

L2 15 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 13:15:35 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2992 TO ITERATE

100.0% PROCESSED 2992 ITERATIONS 292 ANSWERS
SEARCH TIME: 00.00.01

L3 292 SEA SSS FUL L1

=> file hcaplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 166.94 167.15

FILE 'HCAPLUS' ENTERED AT 13:15:42 ON 26 JUN 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 26 Jun 2006 VOL 145 ISS 1
FILE LAST UPDATED: 25 Jun 2006 (20060625/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s l3
L4          25 L3

=> d 1-10
```

L4 ANSWER 1 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2006:443712 HCAPLUS
DN 144:468153
TI 4,7-Dioxobenzothiazole-2-carboxamide derivatives, their preparation, and their use as inhibitors of cdc25 phosphatase
IN Galcera Contour, Marie Odile; Prevost, Gregoire; Sidhu, Alban
PA Societe De Conseils De Recherches Et D'Applications Scientifiques Scras, Fr.
SO Fr. Demande, 55 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI FR 2877667	A1	20060512	FR 2004-11802	20041105
WO 2006051202	A1	20060518	WO 2005-FR2763	20051107

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRAI FR 2004-11802 A 20041105
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2006:64528 HCAPLUS
DN 144:205160
TI The development of 3D-QSAR study and recursive partitioning of heterocyclic quinone derivatives with antifungal activity
AU Choi, Su-Young; Shin, Jae Hong; Ryu, Chung Kyu; Nam, Ky-Youb; No, Kyoung Tai; Park Choo, Hea-Young
CS School of Pharmacy, Ewha Womans University, Seoul, 120-750, S. Korea
SO Bioorganic & Medicinal Chemistry (2006), 14(5), 1608-1617
CODEN: BMECEP; ISSN: 0968-0896
PB Elsevier B.V.
DT Journal
LA English
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:1241413 HCAPLUS
DN 144:128904
TI Synthesis and biological evaluation of novel heterocyclic quinones as inhibitors of the dual specificity protein phosphatase CDC25C
AU Lavergne, Olivier; Fernandes, Anne-Cecile; Brehu, Laetitia; Sidhu, Alban; Brezak, Marie-Christine; Prevost, Gregoire; Ducommun, Bernard; Contour-Galcera, Marie-Odile
CS Ipsen Research Laboratories, Institut Henri Beaufour, Les Ulis, 91960, Fr.
SO Bioorganic & Medicinal Chemistry Letters (2006), 16(1), 171-175
CODEN: BMCLE8; ISSN: 0960-894X
PB Elsevier B.V.
DT Journal
LA English
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:1064575 HCAPLUS
DN 144:266690
TI Inhibition of human tumor cell growth in vivo by an orally bioavailable inhibitor of CDC25 phosphatases
AU Brezak, Marie-Christine; Quaranta, Muriel; Contour-Galcera, Marie-Odile; Lavergne, Olivier; Mondesert, Odile; Auvray, Pierrick; Kasprzyk, Philip G.; Prevost, Gregoire P.; Ducommun, Bernard
CS IPSEN, Institut Henri Beaufour, Les Ulis, Fr.
SO Molecular Cancer Therapeutics (2005), 4(9), 1378-1387
CODEN: MCTOCF; ISSN: 1535-7163
PB American Association for Cancer Research
DT Journal
LA English
RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:409852 HCAPLUS
Correction of: 2005:155224
DN 143:248215
Correction of: 142:197773
TI Product class 9: acridines
AU Prager, R. H.; Williams, C. M.
CS Germany
SO Science of Synthesis (2005), 15, 987-1028
CODEN: SSCYJ9
PB Georg Thieme Verlag
DT Journal; General Review
LA English

L4 ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:124649 HCAPLUS
DN 142:336281
TI Regioselective preparation of 5-amino- and 6-amino-1,3-benzoxazole-4,7-diones from symmetrical diaminophenol and aminoresorcinol
AU Brehu, Laetitia; Fernandes, Anne-Cecile; Lavergne, Olivier
CS Ipsen Research Laboratories, Institut Henri Beaufour, Les Ulis, 91960, Fr.
SO Tetrahedron Letters (2005), 46(9), 1437-1440
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier B.V.
DT Journal
LA English
OS CASREACT 142:336281
RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:610 HCAPLUS
DN 142:93811
TI Preparation of pharmaceutical compositions containing at least a Cdc25 phosphatase inhibitor, in particular benzothiazole-4,7-dione, benzooxazole-4,7-dione derivatives, naphthoquinones, and related compounds, combined with at least another anticancer agent for therapeutic
use in cancer treatment
IN Prevost, Gregoire; Brezak Pannetier, Marie Christine
PA Societe de Conseils de Recherches et d'Applications Scientifiques SCRAS, Fr.
SO Fr. Demande, 135 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2856688	A1	20041231	FR 2003-7649	20030625
	CA 2530668	AA	20050106	CA 2004-2530668	20040624
	WO 2005000852	A2	20050106	WO 2004-FR1586	20040624
	WO 2005000852	A3	20050630		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1641453	A2	20060405	EP 2004-767442	20040624
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
PRAI	FR 2003-7649	A	20030625		
	WO 2004-FR1586	W	20040624		

OS MARPAT 142:93811
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:609 HCAPLUS
DN 142:93810
TI 5- or 6-substituted benzothiazole-4,7-diones and benzooxazole-4,7-diones, their preparation processes via amination, and their use as inhibitors of cdc25 and CD45 phosphatases
IN Galcera Contour, Marie Odile; Lavergne, Olivier
PA Societe de Conseils de Recherches et d'Applications Scientifiques SCRAS, Fr.
SO Fr. Demande, 52 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2856686	A1	20041231	FR 2003-7648	20030625
	AU 2004251912	A1	20050106	AU 2004-251912	20040624
	CA 2530662	AA	20050106	CA 2004-2530662	20040624
	WO 2005000843	A2	20050106	WO 2004-FR1578	20040624
	WO 2005000843	A3	20050526		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1641789	A2	20060405	EP 2004-767434	20040624
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
	US 2006135573	A1	20060622	US 2006-562949	20060210
PRAI	FR 2003-7648	A	20030625		
	WO 2004-FR1578	W	20040624		

OS MARPAT 142:93810
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:182368 HCAPLUS
DN 140:229401
TI Three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands
IN Come, Jon H.; Becker, Frank; Kley, Nikolai A.; Reichel, Christoph
PA USA
SO U.S. Pat. Appl. Publ., 238 pp., Cont.-in-part of U.S. Ser. No. 91,177.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004043388	A1	20040304	US 2002-234985	20020903
	US 2003165873	A1	20030904	US 2002-91177	20020304
	US 2004266854	A1	20041230	US 2004-820453	20040407
PRAI	US 2001-272932P	P	20010302		
	US 2001-278233P	P	20010323		
	US 2001-329437P	P	20011015		
	US 2002-91177	A2	20020304		
	US 2001-336962P	P	20011203		
	WO 2002-US6677	A2	20020304		
	US 2002-234985	A2	20020903		
	WO 2002-US33052	A2	20021015		
	US 2003-460921P	P	20030407		
	US 2003-531872P	P	20031223		

L4 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:645695 HCAPLUS
DN 140:125066
TI Synthesis and antifungal activity of 6-arylthio-/6-Arylamino-4,7-dioxobenzothiazoles
AU Ryu, Chung-Kyu; Choi, Ko Un; Shim, Ju-Yeon; You, Hea-Jung; Choi, Ik Hwa; Chae, Mi Jin
CS College of Pharmacy, Ewha Womans University, Seoul, 120-750, S. Korea
SO Bioorganic & Medicinal Chemistry (2003), 11(18), 4003-4008
CODEN: BMECEP; ISSN: 0968-0896
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 140:125066
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

Andrew Freistein 10/500,411

=> d 11-15

L4 ANSWER 11 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:532654 HCAPLUS
DN 139:101120
TI Benzothiazole-4,7-dione and benzooxazole-4,7-dione derivatives, their preparation, and their use as inhibitors of cdc25 and CD45 phosphatases
IN Galcera Contour, Marie-Odile; Lavergne, Olivier; Brezak Pannetier, Marie-Christine; Prevost, Gregoire
PA Societe De Conseils De Recherches Et D'applications Scientifiques (S.C.R.A.S.), Fr.
SO PCT Int. Appl., 151 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003055868	A1	20030710	WO 2002-FR4544	20021224
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	FR 2834289	A1	20030704	FR 2001-16889	20011227
	FR 2834289	B1	20040319		
	CA 2471713	AA	20030710	CA 2002-2471713	20021224
	AU 2002364485	A1	20030715	AU 2002-364485	20021224
	EP 1461326	A1	20040929	EP 2002-799849	20021224
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	BR 2002015336	A	20041116	BR 2002-15336	20021224
	JP 2005517676	T2	20050616	JP 2003-556399	20021224
	US 2006040996	A1	20060223	US 2004-500411	20040624
	NO 2004003173	A	20040726	NO 2004-3173	20040726
PRAI	FR 2001-16889	A	20011227		
	FR 2002-9415	A	20020725		
	WO 2002-FR4544	W	20021224		

OS MARPAT 139:101120
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:516854 HCAPLUS
DN 139:85338
TI Benzothiazole-4,7-dione and benzooxazole-4,7-dione derivatives, their preparation, and their therapeutic applications as inhibitors of cdc25 and
CD45 phosphatases.
IN Galcera Contour, Marie Odile; Lavergne, Olivier; Brezak Pannetier, Marie Christine; Prevost, Gregoire
PA Societe De Conseils De Recherches Et D'applications Scientifiques (SCRAS),
Fr.
SO Fr. Demande, 44 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2834289	A1	20030704	FR 2001-16889	20011227
	FR 2834289	B1	20040319		
	CA 2471713	AA	20030710	CA 2002-2471713	20021224
	WO 2003055868	A1	20030710	WO 2002-FR4544	20021224
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002364485	A1	20030715	AU 2002-364485	20021224
	EP 1461326	A1	20040929	EP 2002-799849	20021224
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	BR 2002015336	A	20041116	BR 2002-15336	20021224
	CN 1610675	A	20050427	CN 2002-826366	20021224
	JP 2005517676	T2	20050616	JP 2003-556399	20021224
	US 2006040996	A1	20060223	US 2004-500411	20040624
	NO 2004003173	A	20040726	NO 2004-3173	20040726
PRAI	FR 2001-16889	A	20011227		
	FR 2002-9415	A	20020725		
	WO 2002-FR4544	W	20021224		

OS MARPAT 139:85338
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:927175 HCAPLUS
DN 138:14131
TI Preparation of pharmaceutical compositions containing mikanolide, dihydromikanolide or an analog thereof combined with another anticancer agent for therapeutic use in cancer treatment
IN Prevost, Gregoire; Coulomb, Helene; Lavergne, Olivier; Lanco, Christophe; Teng, Beng-Poon
PA Societe De Conseils De Recherches Et D'applications Scientifiques (S.C.R.A.S.), Fr.
SO PCT Int. Appl., 103 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002096348	A2	20021205	WO 2002-FR1800	20020529
	WO 2002096348	A3	20040506		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	FR 2825278	A1	20021206	FR 2001-7104	20010530
	CA 2448528	AA	20021205	CA 2002-2448528	20020529
	EP 1438039	A2	20040721	EP 2002-738284	20020529
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004533456	T2	20041104	JP 2002-592861	20020529
	CN 1691941	A	20051102	CN 2002-812592	20020529
	US 2004138245	A1	20040715	US 2003-478387	20031211
PRAI	FR 2001-7104	A	20010530		
	WO 2002-FR1800	W	20020529		

OS MARPAT 138:14131

L4 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:11059 HCAPLUS
DN 134:246968
TI Modulation of NAD(P)H:quinone oxidoreductase (NQO1) activity mediated by 5-arylamino-2-methyl-4,7-dioxobenzothiazoles and their cytotoxic potential
AU Ryu, Chung-Kyu; Jeong, Hyeh-Jean; Lee, Sang Kook; Kang, Hye-Young; Ko, Kyung-Min; Sun, Yang-Jung; Song, Eun-Ha; Hur, Yeon Hoe; Lee, Chong-Ock
CS College of Pharmacy, Ewha, Womans University, Seoul, 120-750, S. Korea
SO Archives of Pharmacal Research (2000), 23(6), 554-558
CODEN: APHRDQ; ISSN: 0253-6269
PB Pharmaceutical Society of Korea
DT Journal
LA English
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2000:496116 HCAPLUS
DN 133:252352
TI Synthesis and antifungal activities of 5/6-arylamino-4,7-dioxobenzothiazoles
AU Ryu, C.-K.; Kang, H.-Y.; Yi, Y.-J.; Shin, K.-H.; Lee, B.-H.
CS College of Pharmacy, Ewha Womans University, Seoul, 120-750, S. Korea
SO Bioorganic & Medicinal Chemistry Letters (2000), 10(14), 1589-1591
CODEN: BMCLE8; ISSN: 0960-894X
PB Elsevier Science Ltd.
DT Journal
LA English
RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

Andrew Freistein 10/500,411

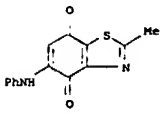
=> d ibib abs hitstr 9-10, 12-25

L4 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:182368 HCAPLUS
DOCUMENT NUMBER: 140:229401
TITLE: Three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands
INVENTOR(S): Come, Jon H.; Becker, Frank; Kley, Nikolai A.; Reichel, Christoph
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 238 pp., Cont.-in-part of U.S. Ser. No. 91,177.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

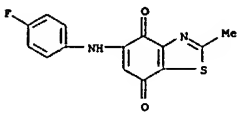
PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004043388	A1	20040304	US 2002-234985		20020903
US 2003165873	A1	20030904	US 2002-91177		20020304
US 2004266854	A1	20041230	US 2004-820453		20040407
PRIORITY APPLN. INFO.:			US 2001-272932P	P	20010302
			US 2001-278233P	P	20010323
			US 2001-329437P	P	20011015
			US 2002-91177	A2	20020304
			US 2001-336962P	P	20011203
			WO 2002-US6677	A2	20020304
			US 2002-234985	A2	20020903
			WO 2002-US33052	A2	20021015
			US 2003-460921P	P	20030407
			US 2003-531872P	P	20031223

AB The invention provides compns. and methods for isolating ligand-binding polypeptides for a user-specified ligand, and for isolating small mol. ligands for a user-specified target polypeptide using an improved class of hybrid ligand compds. Preparation of compds., e.g a methotrexate moiety linked by a polyethylene gycol moiety to dexamethasone, is described.
IT 265312-49-0D, conjugates 265312-50-3D, conjugates 265312-51-4D, conjugates
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands)
RN 265312-49-0 HCAPLUS

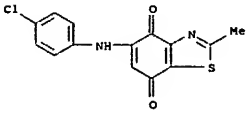
L4 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CN 4,7-Benzothiazoledione, 2-methyl-5-(phenylamino)- (9CI) (CA INDEX NAME)



RN 265312-50-3 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-fluorophenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)



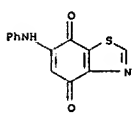
RN 265312-51-4 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-chlorophenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)



L4 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:645695 HCAPLUS
DOCUMENT NUMBER: 140:125066
TITLE: Synthesis and antifungal activity of 6-arylthio-/6-Arylamino-4,7-dioxobenzothiazoles
AUTHOR(S): Ryu, Chung-Kyu; Choi, Ko Un; Shim, Ju-Yeon; You, Hea-Jung; Choi, Ik Hwa; Chae, Mi Jin
CORPORATE SOURCE: College of Pharmacy, Ewha Womans University, Seoul, 120-750, S. Korea
SOURCE: Bioorganic & Medicinal Chemistry (2003), 11(18), 4003-4008
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:125066
GI

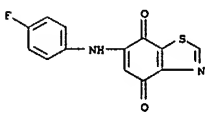
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB 6-Arylthio-/6-arylamino-4,7-dioxobenzothiazoles were synthesized and tested for in vitro antifungal activity against Candida spp. and Aspergillus niger. 6-Arylamino-4,7-dioxobenzothiazoles (I) and (II) showed, in general, more potent antifungal activity than 6-arylthio-4,7-dioxobenzothiazoles (III) and (IV). I and II exhibited the greatest activity. In contrast, 6-arylthio-, 2-/5-methyl- or 5-methoxy-moieties of III and IV did not improve their antifungal activity significantly. The results of this study suggest that 6-arylamino-4,7-dioxobenzothiazoles would be potent antifungal agents.
IT 295776-49-7P 295776-50-0P 295776-51-1P
295776-52-2P 650635-79-3P 650635-80-6P
650635-81-7P 650635-82-8P 650635-83-9P
650635-84-0P 650635-85-1P 650635-86-2P
650635-87-3P 650635-88-4P 650635-89-5P
650635-90-8P 650635-91-9P
RL: BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis and antifungal activity of 6-arylthio-/6-Arylamino-4,7-dioxobenzothiazoles)
RN 295776-49-7 HCAPLUS
CN 4,7-Benzothiazoledione, 6-(phenylamino)- (9CI) (CA INDEX NAME)

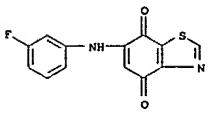


RN 295776-50-0 HCAPLUS

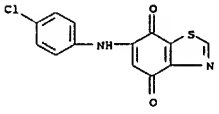
L4 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CN 4,7-Benzothiazoledione, 6-[(4-fluorophenyl)amino]- (9CI) (CA INDEX NAME)



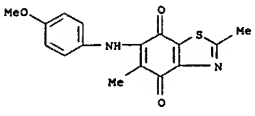
RN 295776-51-1 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(3-fluorophenyl)amino]- (9CI) (CA INDEX NAME)



RN 295776-52-2 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(4-chlorophenyl)amino]- (9CI) (CA INDEX NAME)

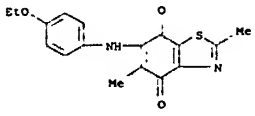


RN 650635-79-3 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(4-methoxyphenyl)amino]-2,5-dimethyl- (9CI) (CA INDEX NAME)

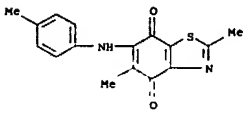


RN 650635-80-6 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(4-ethoxyphenyl)amino]-2,5-dimethyl- (9CI) (CA

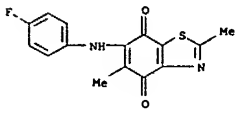
L4 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
INDEX NAME)



RN 650635-81-7 HCAPLUS
CN 4,7-Benzothiazoledione, 2,5-dimethyl-6-[(4-methylphenyl)amino]- (9CI) (CA
INDEX NAME)

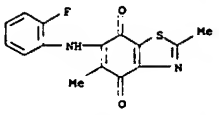


RN 650635-82-8 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(4-fluorophenyl)amino]-2,5-dimethyl- (9CI) (CA
INDEX NAME)

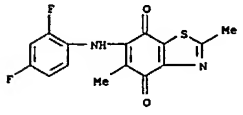


RN 650635-83-9 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(2-fluorophenyl)amino]-2,5-dimethyl- (9CI) (CA
INDEX NAME)

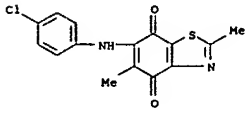
L4 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 650635-84-0 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(2,4-difluorophenyl)amino]-2,5-dimethyl- (9CI) (CA INDEX NAME)

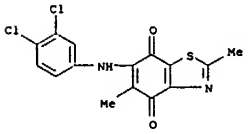


RN 650635-85-1 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(4-chlorophenyl)amino]-2,5-dimethyl- (9CI) (CA
INDEX NAME)

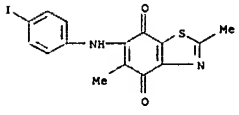


RN 650635-86-2 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(3,4-dichlorophenyl)amino]-2,5-dimethyl- (9CI) (CA INDEX NAME)

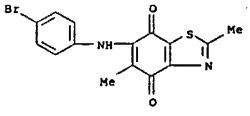
L4 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



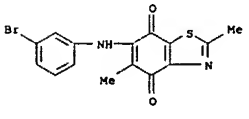
RN 650635-87-3 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(4-iodophenyl)amino]-2,5-dimethyl- (9CI) (CA INDEX NAME)



RN 650635-88-4 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(4-bromophenyl)amino]-2,5-dimethyl- (9CI) (CA INDEX NAME)

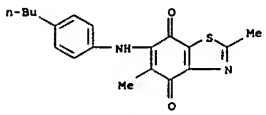


RN 650635-89-5 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(3-bromophenyl)amino]-2,5-dimethyl- (9CI) (CA INDEX NAME)

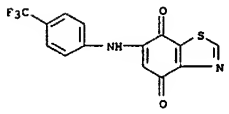


RN 650635-90-8 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(4-butylphenyl)amino]-2,5-dimethyl- (9CI) (CA

L4 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
INDEX NAME)



RN 650635-91-9 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[[4-(trifluoromethyl)phenyl]amino]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

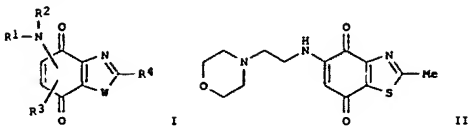
L4 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:516854 HCAPLUS
DOCUMENT NUMBER: 139:85338
TITLE: Benzothiazole-4,7-dione and benzooxazole-4,7-dione derivatives, their preparation, and their therapeutic applications as inhibitors of cdc25 and CD45 phosphatases.
INVENTOR(S): Galcera Contour, Marie Odile; Lavergne, Olivier; Brezak Pannetier, Marie Christine; Prevost, Gregoire
PATENT ASSIGNEE(S): Societe De Conseils De Recherches Et D'applications Scientifiques (SCRAS), Fr.
SOURCE: Fr. Demande, 44 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2834289	A1	20030704	FR 2001-16889	20011227
FR 2834289	B1	20040319		
CA 2471713	AA	20030710	CA 2002-2471713	20021224
WO 2003055868	A1	20030710	WO 2002-FR4544	20021224
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002364485	A1	20030715	AU 2002-364485	20021224
EP 1461326	A1	20040929	EP 2002-799849	20021224
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002015336	A	20041116	BR 2002-15336	20021224
CN 1610675	A	20050427	CN 2002-826366	20021224
JP 2005517676	T2	20050616	JP 2003-556399	20021224
US 2006040996	A1	20060223	US 2004-500411	20040624
NO 2004003173	A	20040726	NO 2004-3173	20040726

PRIORITY APPLN. INFO.: FR 2001-16889 A 20011227
FR 2002-9415 A 20020725
WO 2002-FR4544 W 20021224

OTHER SOURCE(S): MARPAT 139:85338
GI

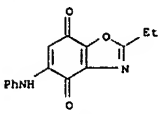
L4 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



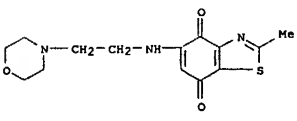
AB The invention discloses the use of new compds. which are inhibitors of both cdc25 phosphatases (in particular cdc25-C) and the phosphatase CD45. The disclosed compds. are the heterocyclic diones I [R1 = H, alkyl, cycloalkyl, (CH2)-X-Y or (CH2)-Z-NR5R6; also (when W = O) R1 = (un)substituted aryl; R2 = H, alkyl; or NR1R2 may form a heterocyclic ring; R3 = H, halo, alkyl, haloalkyl, or alkoxy; R4 = alkyl, cycloalkyl, cycloalkylalkyl, cyano, amino, CH2CO2H or alkyl esters, CH2CONH2 or CH2NH2 or derivs., (un)substituted heteroaryl; R5, R6 = H, alkyl, aralkyl, or (CH2)nOH in which n = 1-6; or NR5R6 = saturated, (un)substituted N-heterocycle; X, Z = alkylene; Y = saturated, (un)substituted mono-, di-, or tricyclic carbo- or N/O/S heterocycle, or (un)substituted carbo- or heterocyclic aryl; and W = O or S.]. According to the invention, compds. I can be used in particular to prepare a drug intended to treat cancer. Claimed uses include treatment of tumors, non-malignant proliferative disorders, neurodegenerative disorders, parasitic or viral infections, alopecia of several origins, autoimmune disorders, graft rejection, and inflammatory or allergic disorders. Seventeen examples are prepared and individually cited in claims. For instance, condensation of 4-(2-aminoethyl)morpholine with 5-methoxy-2-methylbenzothiazole-4,7-dione in refluxing anhydrous EtOH gave title compound II. All compds. I inhibited the phosphatase activity of purified recombinant cdc25-C in vitro with IC50 values of ≤ 10 μM. Five compds., including II, inhibited the tyrosine phosphatase activity of CD45 at ≤ 10 μM. Twelve compds., including II, had IC50 values of ≤ 10 μM against proliferation of human cancer cell lines Mia-Paca2 and DU-145 in vitro.

IT 477338-07-1P, 5-Anilino-2-ethyl-4,7-dihydrobenzo[d][1,3]oxazole-4,7-dione
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; preparation of benzothiazoledione and benzooxazoledione derivs. as inhibitors of cdc25 and CD45 phosphatases and as antiproliferatives)
RN 477338-07-1 HCAPLUS
CN 4,7-Benzoxazoledione, 2-ethyl-5-(phenylamino)- (9CI) (CA INDEX NAME)

L4 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

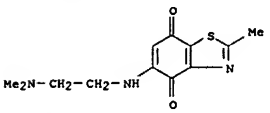


IT 477338-05-9P, 2-Methyl-5-[[2-(4-morpholinyl)ethyl]amino]-1,3-benzothiazole-4,7-dione 477603-18-2P, 5-[[2-(Dimethylamino)ethyl]amino]-2-methyl-1,3-benzothiazole-4,7-dione 477603-19-3P, 5-[[6-(Dimethylamino)hexyl]amino]-2-methyl-1,3-benzothiazole-4,7-dione 477603-20-6P, 5-[[3-(Dimethylamino)-2,2-dimethylpropyl]amino]-2-methyl-1,3-benzothiazole-4,7-dione 477603-21-7P, 2-Methyl-5-[[3-(4-methyl-1-piperazinyl)propyl]amino]-1,3-benzothiazole-4,7-dione 477603-22-8P, 5-[(1-Ethylhexyl)amino]-2-methyl-1,3-benzothiazole-4,7-dione 477603-23-9P, 5-[(1-Adamantylmethyl)amino]-2-methyl-1,3-benzothiazole-4,7-dione 477603-24-0P, 2-Methyl-5-[(2-thienylmethyl)amino]-1,3-benzothiazole-4,7-dione 477603-25-1P, 5-[(3-Chlorobenzyl)amino]-2-methyl-1,3-benzothiazole-4,7-dione 477603-26-2P, 2-Methyl-5-[(4-pyridinylmethyl)amino]-1,3-benzothiazole-4,7-dione 477603-27-3P, 2-Methyl-5-(propylamino)-1,3-benzothiazole-4,7-dione 477603-28-4P, 5-[[3-(1H-Imidazol-1-yl)propyl]amino]-2-methyl-1,3-benzothiazole-4,7-dione 477603-29-5P, 4-[2-[(2-Methyl-4,7-dioxo-4,7-dihydro-1,3-benzothiazol-5-yl)amino]ethyl]benzenesulfonamide 477603-31-9P, 5-Anilino-6-chloro-2-ethyl-4,7-dihydrobenzo[d][1,3]oxazole-4,7-dione 477603-32-0P, 2-Ethyl-5-(4-fluoroanilino)-4,7-dihydrobenzo[d][1,3]oxazole-4,7-dione
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of benzothiazoledione and benzoxazoledione derivs. as inhibitors of cdc25 and CD45 phosphatases and as antiproliferatives)
RN 477338-05-9 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-[[2-(4-morpholinyl)ethyl]amino]- (9CI) (CA INDEX NAME)



RN 477603-18-2 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[[2-(dimethylamino)ethyl]amino]-2-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 477603-19-3 HCAPLUS
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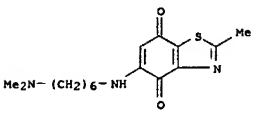
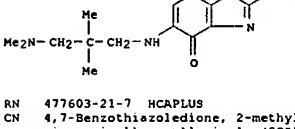
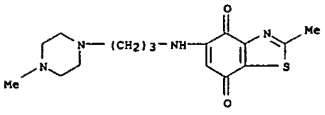


RN 477603-20-6 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[[3-(dimethylamino)-2,2-dimethylpropyl]amino]-2-methyl- (9CI) (CA INDEX NAME)

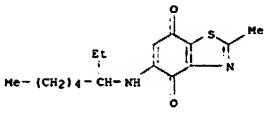


RN 477603-21-7 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-[[3-(4-methyl-1-piperazinyl)propyl]amino]- (9CI) (CA INDEX NAME)

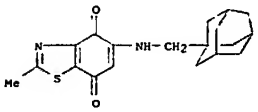


RN 477603-22-8 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(1-ethylhexyl)amino]-2-methyl- (9CI) (CA INDEX

L4 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
NAME)



RN 477603-23-9 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-[(tricyclo[3.3.1.13,7]dec-1-ylmethyl)amino]- (9CI) (CA INDEX NAME)



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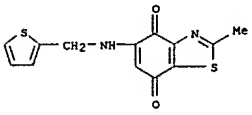
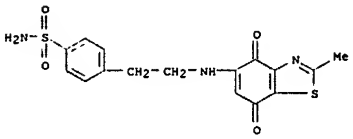
CN 4,7-Benzothiazoledione, 2-methyl-5-[(2-thienylmethyl)amino]- (9CI) (CA INDEX NAME)

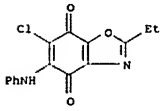


RN 477603-25-1 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[[(3-chlorophenyl)methyl]amino]-2-methyl- (9CI) (CA INDEX NAME)

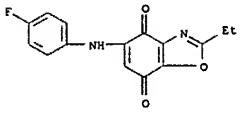
L4 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
RN 477603-29-5 HCAPLUS
CN Benzenesulfonamide, 4-[2-[(4,7-dihydro-2-methyl-4,7-dioxo-5-benzothiazolyl)amino]ethyl]- (9CI) (CA INDEX NAME)



RN 477603-31-9 HCAPLUS
CN 4,7-Benzoxazoledione, 6-chloro-2-ethyl-5-(phenylamino)- (9CI) (CA INDEX NAME)

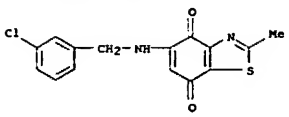


RN 477603-32-0 HCAPLUS
CN 4,7-Benzoxazoledione, 2-ethyl-5-[(4-fluorophenyl)amino]- (9CI) (CA INDEX NAME)

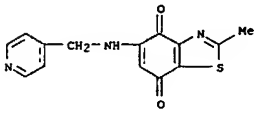


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 477603-26-2 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-[(4-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



RN 477603-27-3 HCAPLUS
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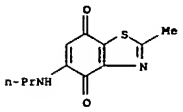
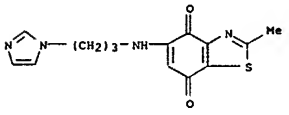


RN 477603-28-4 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[[3-(1H-imidazol-1-yl)propyl]amino]-2-methyl- (9CI) (CA INDEX NAME)



L4 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:927175 HCAPLUS
DOCUMENT NUMBER: 138:14131
TITLE: Preparation of pharmaceutical compositions containing mikanolide, dihydromikanolide or an analog thereof combined with another anticancer agent for therapeutic use in cancer treatment
INVENTOR(S): Prevost, Gregoire; Coulomb, Helene; Lavergne, Olivier; Lanco, Christophe; Teng, Beng-Poon
PATENT ASSIGNEE(S): Societe De Conseils De Recherches Et D'applications Scientifiques (S.C.R.A.S.), Fr.
SOURCE: PCT Int. Appl., 103 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002096348	A2	20021205	WO 2002-FR1800	20020529
WO 2002096348	A3	20040506		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2825278	A1	20021206	FR 2001-7104	20010530
CA 2448528	AA	20021205	CA 2002-2448528	20020529
EP 1438039	A2	20040721	EP 2002-738284	20020529
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JP 2004533456	T2	20041104	JP 2002-592861	20020529
CN 1691941	A	20051102	CN 2002-812592	20020529
US 2004138245	A1	20040715	US 2003-478387	20031211

PRIORITY APPLN. INFO.: FR 2001-7104 A 20010530
WO 2002-FR1800 W 20020529

OTHER SOURCE(S): MARPAT 138:14131
GI

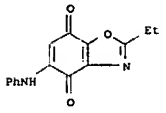
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention concerns a product comprising at least mikanolide (I), dihydromikanolide or an analog, e.g., II [R1 = H, SR4, NR4R5; R2 = SR6, NR6R7; R3 = OH, O-acyl, O-silyl, O-carbamyl; R4, R6 = alkyl, cycloalkyl, (cycloalkyl)alkyl, hydroxyalkyl, (un)substituted aryl, aralkyl; R5, R7 = H, alkyl, cycloalkyl, (cycloalkyl)alkyl, hydroxyalkyl, (un)substituted aryl, aralkyl; R4R5 = 5- to 7-membered N-containing ring] and III, or their

L4 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
pharmaceutically acceptable salts, combined with at least one other anticancer agent for simultaneous, sep. or prolonged therapeutic use in cancer treatment. In a preferred embodiment of the invention, the mikanolide, dihydromikanolide or one analog thereof is combined with enzymic inhibitors such as G heterotrimeric protein inhibitors, IV [X = R22; Y = R18; XY = 6-membered ring, CHR18CHR19; R11 = H, lower alkyl, alkylthio; R12, R13 = H, lower alkyl; R14 = O, H2; R5 = H, lower alkyl, (cycloalkyl)alkyl, alkenyl, alkynyl, aryl, arylalkyl, heterocyclyl, heterocyclylalkyl; R16, R17 = H, CONHCHR13CO2R14, lower alkyl, aryl, arylalkyl, heterocyclyl, heterocyclylalkyl; R18, R19 = H, lower alkyl, aryl, arylalkyl, heterocyclyl, heterocyclylalkyl; R18R19 = aryl or heterocycly ring; R20, R21 = H, aryl, heterocyclyl, alkyl, arylalkyl, heterocyclylalkyl; R22 = NR9, S, O; R23 = ; R24 = H, lower alkyl], V (R18, R19 = H, lower alkyl, aryl, arylalkyl, heterocyclyl, heterocyclylalkyl; R18R19 = aryl or heterocycly ring) or VI (R22 = NR9, S, O), or alkylating agents such as cis-platin. Thus, VII was prepd. from mikanolide. VII was tested for cell proliferation inhibition activity [only 34% of cells lived when combined with VIII·HCl (vs. human colon cancer HT-29 cells)].

IT 477338-07-1P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of compns. containing mikanolide, dihydromikanolide or an analog combined with another anticancer agent for chemotherapy)

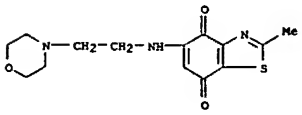
RN 477338-07-1 HCAPLUS
CN 4,7-Benzoxazoledione, 2-ethyl-5-(phenylamino)- (9CI) (CA INDEX NAME)



IT 477338-05-9P 477603-18-2P 477603-19-3P
477603-20-6P 477603-21-7P 477603-22-8P
477603-23-9P 477603-24-0P 477603-25-1P
477603-26-2P 477603-27-3P 477603-28-4P
477603-29-5P 477603-31-9P 477603-32-0P
477603-37-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of compns. containing mikanolide, dihydromikanolide or an analog combined with another anticancer agent for chemotherapy)

RN 477338-05-9 HCAPLUS

L4 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CN 4,7-Benzothiazoledione, 2-methyl-5-[[2-(4-morpholinyl)ethyl]amino]- (9CI) (CA INDEX NAME)



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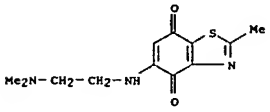

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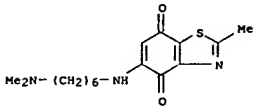
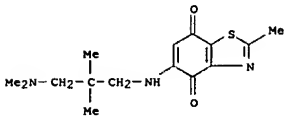


RN 477603-20-6 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[[3-(dimethylamino)-2,2-dimethylpropyl]amino]-2-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



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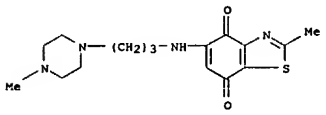
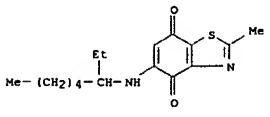
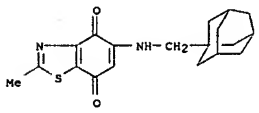


RN 477603-22-8 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(1-ethylhexyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

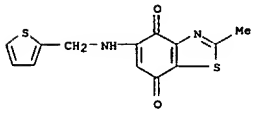


RN 477603-23-9 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-[(tricyclo[3.3.1.13,7]dec-1-ylmethyl)amino]- (9CI) (CA INDEX NAME)

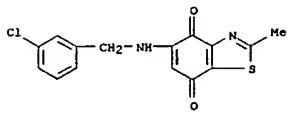


RN 477603-24-0 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-[(2-thienylmethyl)amino]- (9CI) (CA

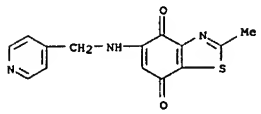
L4 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
INDEX NAME)



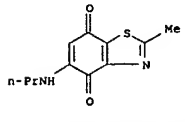
RN 477603-25-1 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[[(3-chlorophenyl)methyl]amino]-2-methyl- (9CI) (CA INDEX NAME)



RN 477603-26-2 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-[(4-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)

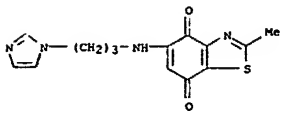


RN 477603-27-3 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-(propylamino)- (9CI) (CA INDEX NAME)

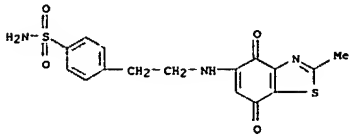


RN 477603-28-4 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[[3-(1H-imidazol-1-yl)propyl]amino]-2-methyl-

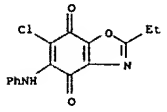
L4 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
(9CI) (CA INDEX NAME)



RN 477603-29-5 HCAPLUS
CN Benzenesulfonamide, 4-[2-[[4,7-dihydro-2-methyl-4,7-dioxo-5-benzothiazolyl]amino]ethyl]- (9CI) (CA INDEX NAME)

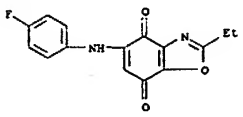


RN 477603-31-9 HCAPLUS
CN 4,7-Benzoxazoledione, 6-chloro-2-ethyl-5-(phenylamino)- (9CI) (CA INDEX NAME)

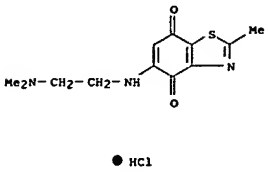


RN 477603-32-0 HCAPLUS
CN 4,7-Benzoxazoledione, 2-ethyl-5-[(4-fluorophenyl)amino]- (9CI) (CA INDEX NAME)

L4 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 477603-37-5 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[[2-(dimethylamino)ethyl]amino]-2-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

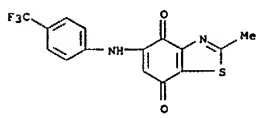
L4 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:11059 HCAPLUS
DOCUMENT NUMBER: 134:246968
TITLE: Modulation of NAD(P)H:quinone oxidoreductase (NQO1) activity mediated by 5-arylamino-2-methyl-4,7-dioxobenzothiazoles and their cytotoxic potential
AUTHOR(S): Ryu, Chung-Kyu; Jeong, Hyeh-Jean; Lee, Sang Kook; Kang, Hye-Young; Ko, Kyung-Min; Sun, Yang-Jung; Song, Eun-Ha; Hur, Yeon Hoe; Lee, Chong-Ock
CORPORATE SOURCE: College of Pharmacy, Ewha, Womans University, Seoul, 120-750, S. Korea
SOURCE: Archives of Pharmacal Research (2000), 23(6), 554-558
CODEN: APHRDQ; ISSN: 0253-6269
PUBLISHER: Pharmaceutical Society of Korea
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Synthesized 5-arylamino-2-methyl-4,7-dioxobenzothiazoles were evaluated for modulation of NAD(P)H:quinone oxidoreductase (NQO1) activity with the cytosolic fractions derived from cultured human lung cancer cells and their cytotoxicity in cultured several human solid cancer cell lines. The 4,7-dioxobenzothiazoles affected the reduction potential by NQO1 activity and showed a potent cytotoxic activity against human cancer cell lines. The six tested compds. were considered as more potent cytotoxic agents, and comparable modulators of NQO1 activity.

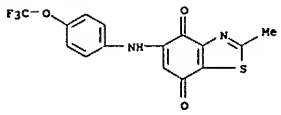
IT 295776-55-5P 295776-56-6P 295776-57-7P
295776-58-8P 295776-59-9P 295776-60-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(modulation of NAD(P)H:quinone oxidoreductase (NQO1) activity mediated by arylaminomethyldioxobenzothiazoles and cytotoxic potential)

RN 295776-55-5 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-[[4-(trifluoromethyl)phenyl]amino]- (9CI) (CA INDEX NAME)

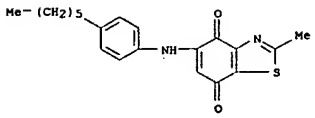


RN 295776-56-6 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-[[4-(trifluoromethoxy)phenyl]amino]- (9CI) (CA INDEX NAME)

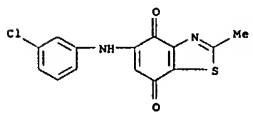
L4 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



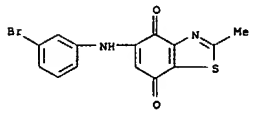
RN 295776-57-7 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-hexylphenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)



RN 295776-58-8 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(3-chlorophenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

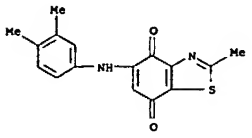


RN 295776-59-9 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(3-bromophenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

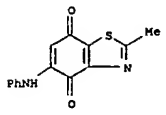


RN 295776-60-2 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(3,4-dimethylphenyl)amino]-2-methyl- (9CI) (CA

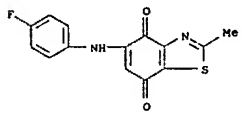
L4 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
INDEX NAME)



IT 265312-49-0 265312-50-3 265312-51-4
265312-52-5 265312-53-6 265312-54-7
265312-55-8 265312-56-9 265312-57-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(modulation of NAD(P)H:quinone oxidoreductase (NQO1) activity mediated by arylaminomethyldioxobenzothiazoles and cytotoxic potential)
RN 265312-49-0 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-(phenylamino)- (9CI) (CA INDEX NAME)

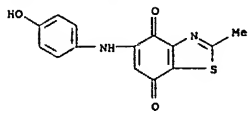


RN 265312-50-3 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-fluorophenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

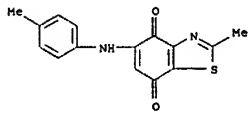


RN 265312-51-4 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-chlorophenyl)amino]-2-methyl- (9CI) (CA

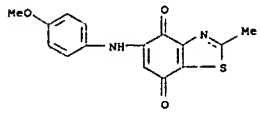
L4 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



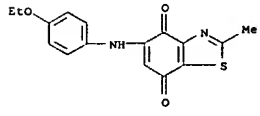
RN 265312-55-8 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-[(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)



RN 265312-56-9 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-methoxyphenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

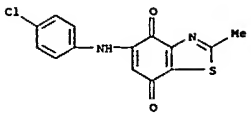


RN 265312-57-0 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-ethoxyphenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

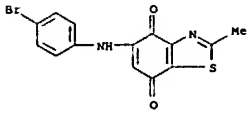


REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE

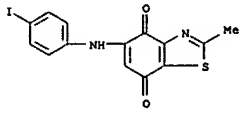
L4 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
INDEX NAME)



RN 265312-52-5 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-bromophenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)



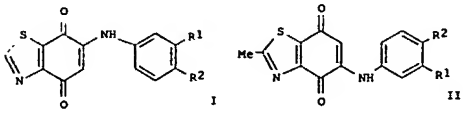
RN 265312-53-6 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-iodophenyl)amino]-2-methyl- (9CI) (CA INDEX
NAME)



RN 265312-54-7 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-hydroxyphenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

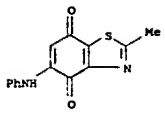
L4 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:496116 HCAPLUS
DOCUMENT NUMBER: 133:252352
TITLE: Synthesis and antifungal activities of 5/6-arylamino-4,7-dioxobenzothiazoles
AUTHOR(S): Ryu, C.-K.; Kang, H.-Y.; Yi, Y.-J.; Shin, K.-H.; Lee, B.-H.
CORPORATE SOURCE: College of Pharmacy, Ewha Womans University, Seoul, 120-750, S. Korea
SOURCE: Bioorganic & Medicinal Chemistry Letters (2000), 10(14), 1589-1591
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



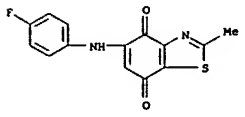
AB Title compds I and II (R1, R2 = H, halo, alkoxy, etc.) were synthesized and tested for in vitro antifungal activities against pathogenic fungi. Most of the tested 4,7-dioxobenzothiazoles exhibited potent antifungal activities against Candida species and Aspergillus niger.

IT 265312-49-0P 265312-50-3P 265312-51-4P
265312-55-8P 265312-57-0P 295776-49-7P
295776-50-0P 295776-51-1P 295776-52-2P
295776-53-3P 295776-54-4P 295776-55-5P
295776-56-6P 295776-57-7P 295776-58-8P
295776-59-9P 295776-60-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis and antifungal activities of 5/6-arylamino-4,7-dioxobenzothiazoles)

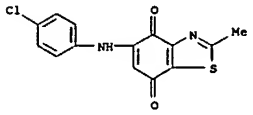
RN 265312-49-0 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-(phenylamino)- (9CI) (CA INDEX NAME)



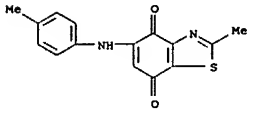
RN 265312-50-3 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-fluorophenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)



RN 265312-51-4 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-chlorophenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

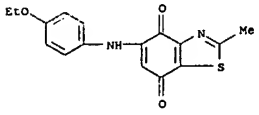


RN 265312-55-8 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-[(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)

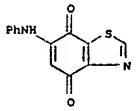


L4 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

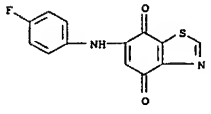
RN 265312-57-0 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-ethoxyphenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)



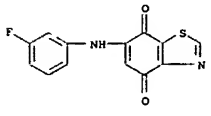
RN 295776-49-7 HCAPLUS
CN 4,7-Benzothiazoledione, 6-(phenylamino)- (9CI) (CA INDEX NAME)



RN 295776-50-0 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(4-fluorophenyl)amino]- (9CI) (CA INDEX NAME)

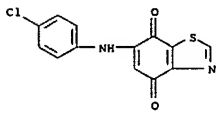


RN 295776-51-1 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(3-fluorophenyl)amino]- (9CI) (CA INDEX NAME)

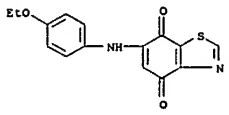


RN 295776-52-2 HCAPLUS

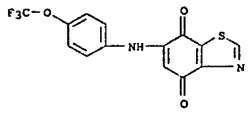
L4 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CN 4,7-Benzothiazoledione, 6-[(4-chlorophenyl)amino]- (9CI) (CA INDEX NAME)



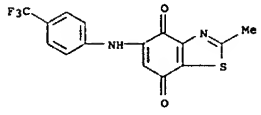
RN 295776-53-3 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(4-ethoxyphenyl)amino]- (9CI) (CA INDEX NAME)



RN 295776-54-4 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[[4-(trifluoromethoxy)phenyl]amino]- (9CI) (CA INDEX NAME)

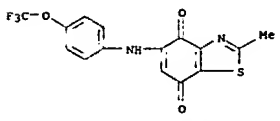


RN 295776-55-5 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-[[4-(trifluoromethyl)phenyl]amino]- (9CI) (CA INDEX NAME)

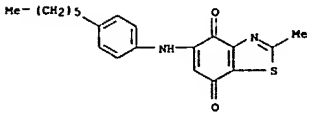


RN 295776-56-6 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-[[4-(trifluoromethoxy)phenyl]amino]-

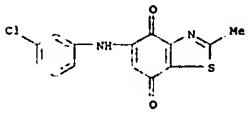
L4 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
(9CI) (CA INDEX NAME)



RN 295776-57-7 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-hexylphenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

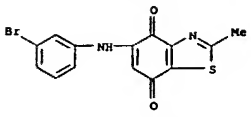


RN 295776-58-8 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(3-chlorophenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

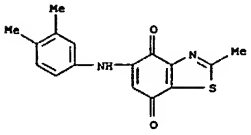


RN 295776-59-9 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(3-bromophenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 295776-60-2 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(3,4-dimethylphenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

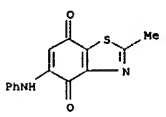
L4 ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:208754 HCAPLUS
DOCUMENT NUMBER: 132:308282
TITLE: 5-arylamino-2-methyl-4,7-dioxobenzothiazoles as inhibitors of cyclin-dependent kinase 4 and cytotoxic agents
AUTHOR(S): Ryu, Chung-Kyu; Kang, Hye-Young; Lee, Sang Kook; Nam, Kyung Ae; Hong, Chang Yong; Ko, Won-Gil; Lee, Byung-Hoon
CORPORATE SOURCE: College of Pharmacy, Ewha Womans University, Seoul, 120-750, S. Korea
SOURCE: Bioorganic & Medicinal Chemistry Letters (2000), 10(5), 461-464
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

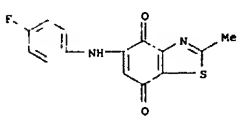
AB 5-Arylamino-2-methyl-4,7-dioxobenzothiazoles were synthesized as inhibitors of cyclin-dependent kinase 4 (CDK4) and cytotoxic agents. Most of the 4,7-dioxobenzothiazoles exhibited selective inhibitory activities for the CDK4 and cytotoxic potential against human cancer cell lines.

IT **265312-49-0P 265312-50-3P 265312-51-4P**
265312-52-5P 265312-53-6P 265312-54-7P
265312-55-8P 265312-56-9P 265312-57-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of benzothiazoles as inhibitors of cyclin-dependent kinase 4 and antitumors)

RN 265312-49-0 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-(phenylamino)- (9CI) (CA INDEX NAME)

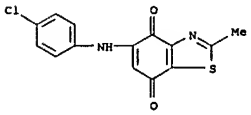


RN 265312-50-3 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-fluorophenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

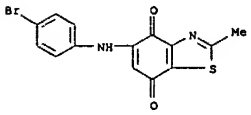


L4 ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

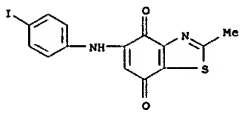
RN 265312-51-4 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-chlorophenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)



RN 265312-52-5 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-bromophenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

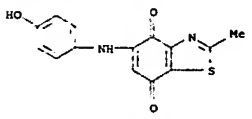


RN 265312-53-6 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-iodophenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

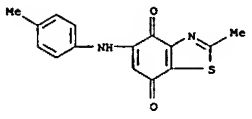


RN 265312-54-7 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-hydroxyphenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)

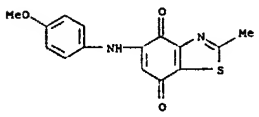
L4 ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



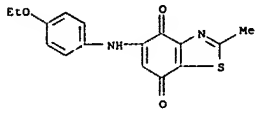
RN 265312-55-8 HCAPLUS
CN 4,7-Benzothiazoledione, 2-methyl-5-[(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)



RN 265312-56-9 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-methoxyphenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)



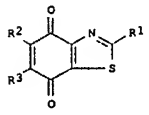
RN 265312-57-0 HCAPLUS
CN 4,7-Benzothiazoledione, 5-[(4-ethoxyphenyl)amino]-2-methyl- (9CI) (CA INDEX NAME)



L4 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:142596 HCAPLUS
DOCUMENT NUMBER: 132:151810
TITLE: Preparation and application of benzothiazolediones
INVENTOR(S): Lu, Bin; Liu, Cuihua; Xu, Jianxing; Zhang, Jingling
PATENT ASSIGNEE(S): Central-China Normal Univ., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1184106	A	19980610	CN 1996-120903	19961129
CN 1068317	B	20010711		
PRIORITY APPLN. INFO.:			CN 1996-120903	19961129

OTHER SOURCE(S): MARPAT 132:151810
GI



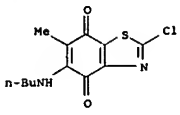
I

AB Title compds. [I; R1 = H, Cl, F, Br, I, N3; R2 = alkylamino, alkylthio, aryl; R3 = alkyl, alkoxy, OH, Cl, F, Br, I] are prepared as bactericide, pesticide, and antimalarials (no data) by silicification 4-R3-aniline with H2SO4 at 30-50°, substituting with NaSCN at 70-90° to obtain 4-R3-phenylthiourea, cyclizing with Br2 as cyclizing agent to obtain 6-R3-2-amino-benzothiazole, diazotizing and substituting to obtain 2-Cl-6-R3-benzothiazole, nitrifying with KNO3 at 70-90°, reducing with Fe/HOAc to obtain 7-amino-2-Cl-6-R3-benzothiazole, oxidizing, and substituting with R2H for 12-16 h (for thiol or aryl mercaptan) or 15-60 min (for amine). The title compound II was prepared
IT **174910-58-8P 257938-49-1P 257938-50-4P 257938-51-5P 257938-52-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and application of benzothiazolediones)
RN 174910-58-8 HCAPLUS
CN 4,7-Benzothiazoledione, 5-(butylamino)-2-chloro-6-methyl- (9CI) (CA INDEX NAME)

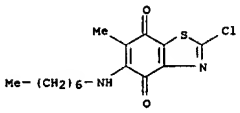
L4 ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

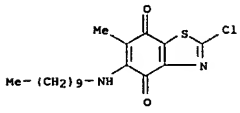
L4 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



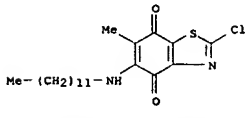
RN 257938-49-1 HCAPLUS
CN 4,7-Benzothiazoledione, 2-chloro-5-(heptylamino)-6-methyl- (9CI) (CA INDEX NAME)



RN 257938-50-4 HCAPLUS
CN 4,7-Benzothiazoledione, 2-chloro-5-(decylamino)-6-methyl- (9CI) (CA INDEX NAME)

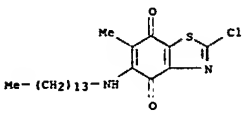


RN 257938-51-5 HCAPLUS
CN 4,7-Benzothiazoledione, 2-chloro-5-(dodecylamino)-6-methyl- (9CI) (CA INDEX NAME)

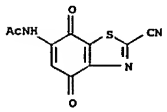


RN 257938-52-6 HCAPLUS
CN 4,7-Benzothiazoledione, 2-chloro-6-methyl-5-(tetradecylamino)- (9CI) (CA

L4 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
INDEX NAME)

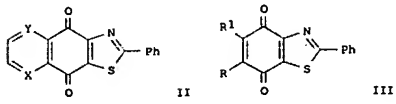


L4 ANSWER 18 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:73540 HCAPLUS
DOCUMENT NUMBER: 132:222497
TITLE: Synthesis and in vitro antitumor evaluation of benzothiazole-2-carbonitrile derivatives
AUTHOR(S): Beneteau, Valerie; Besson, Thierry; Guillard, Jerome; Leonce, Stephane; Pfeiffer, Bruno
CORPORATE SOURCE: Laboratoire de Genie Proteique et Cellulaire, UPRES 2001, Pole Sciences et Technologie, Laboratoire de Genie Proteique et Cellulaire, UPRES 2001, Pole Sciences et Technologie, Universite de La Rochelle, La Rochelle, F-17042, Fr.
SOURCE: European Journal of Medicinal Chemistry (1999), 34(12), 1053-1060
CODEN: EJMCA5; ISSN: 0223-5234
PUBLISHER: Editions Scientifiques et Medicales Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Novel benzothiazole derivs. were prepared via corresponding imino-1,2,3-dithiazoles. The cytotoxicity of some of these polyheterocyclic compds. was studied. The results show that 2-cyano derivs. exhibit a medium in vitro antitumor activity.
IT 261352-91-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and in vitro antitumor activity of benzothiazolecarbonitriles)
RN 261352-91-4 HCAPLUS
CN Acetamide, N-(2-cyano-4,7-dihydro-4,7-dioxo-6-benzothiazolyl)- (9CI) (CA INDEX NAME)



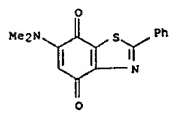
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:86549 HCAPLUS
DOCUMENT NUMBER: 130:252275
TITLE: Synthesis and structure verification of an analog of kuanoniamine A
AUTHOR(S): Lyon, Michael A.; Lawrence, Simon; Williams, David J.; Jackson, Yvette A.
CORPORATE SOURCE: Department of Chemistry, University of the West Indies, Mona, Kingston, Jamaica
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1999), (4), 437-442
CODEN: JCPRB4; ISSN: 0300-922X
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

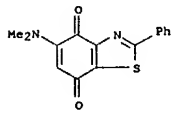


II III

AB Synthesis of 9-phenyl-7H-benzothiazolo[4,5,6-ij][2,7]naphthyridin-7-one, an analog of kuanoniamine A 8, is described. The synthesis involves a hetero Diels-Alder reaction of crotonaldehyde dimethylhydrazone with 4,7-dioxo-2-phenylbenzothiazole (I) or with 6-bromo-4,7-dioxo-2-phenylbenzothiazole followed by annulation of the appropriate adduct. Reaction with I produced two sets of regioisomers - the thiazoloquinolinediones II (X = H, Y = CMe; X = CMe, Y = N), the dimethylamino dioxobenzothiazoles III (R = NMe2, R1 = H; R = H, R1 = NMe2). The structure of III (R = H, R1 = NMe2) was determined by single-crystal x-ray structure anal. Verification of the other structures and methods used to improve the Diels-Alder reaction are described.
IT 221541-91-9P 221541-92-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of benzothiazolonaphthyridinone as kuanoniamine A analog)
RN 221541-91-9 HCAPLUS
CN 4,7-Benzothiazoledione, 6-(dimethylamino)-2-phenyl- (9CI) (CA INDEX NAME)

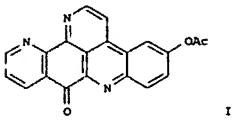


L4 ANSWER 19 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
RN 221541-92-0 HCAPLUS
CN 4,7-Benzothiazoledione, 5-(dimethylamino)-2-phenyl- (9CI) (CA INDEX NAME)



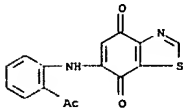
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 20 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:789577 HCAPLUS
DOCUMENT NUMBER: 128:75572
TITLE: Synthetic studies on pentacyclic aromatic alkaloids, kuanoniamine A, 11-hydroxyascididemin, and neocalliactine acetate
AUTHOR(S): Kitahara, Yoshiyasu; Nakahara, Shinsuke; Yonezawa, Takanobu; Nagatsu, Masanori; Shibano, Yoshikazu; Kubo, Akinori
CORPORATE SOURCE: Meiji College of Pharmacy, Tokyo, 154, Japan
SOURCE: Tetrahedron (1997), 53(50), 17029-17038
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 128:75572
GI



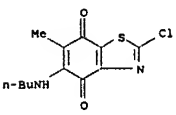
I

AB A pentacyclic aromatic alkaloid, kuanoniamine A was synthesized in three steps from 6-methoxybenzothiazole-4,7-dione and 2-aminoacetophenone. 11-Hydroxyascididemin was prepared from 5,8-quinolinediones or a 1,4-acridinedione. The structure of neocalliactine acetate, a derivative of calliactine, was determined to be I by total synthesis from 6-methoxy-5,8-quinolinedione and 2-amino-5-methoxyacetophenone.
IT 150222-02-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthetic studies on pentacyclic aromatic alkaloids, kuanoniamine A, 11-hydroxyascididemin, and neocalliactine acetate)
RN 150222-02-9 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(2-acetylphenyl)amino]- (9CI) (CA INDEX NAME)

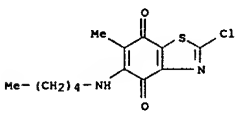


L4 ANSWER 20 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

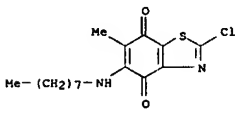
L4 ANSWER 21 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:112692 HCAPLUS
DOCUMENT NUMBER: 124:249641
TITLE: The inhibitory effect of dioxobenzothiazole analogs on the mitochondrial respiratory chain
AUTHOR(S): Lu, Bin; Liu, Cuihua; Shang, Heyong; Xu, Jianxing
CORPORATE SOURCE: Inst. of Organic Synthesis, Huazhong Normal Univ., Wuhan, 430070, Peop. Rep. China
SOURCE: Shengwu Huaxue Yu Shengwu Wuli Jinzhan (1995), 22(6), 536-40
CODEN: SHYCD4; ISSN: 1000-3282
PUBLISHER: Kexue
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Two analogs of dioxobenzothiazole, 2-chloro-5-dodecylmercapto-6-methyl-4,7-dioxobenzothiazole (2-Cl-DMMDBT) and 2-chloro-5-butylamino-6-methyl-4,7-dioxobenzothiazole (2-Cl-BAMDBT), were synthesized. Their inhibitory properties on the enzymes of mitochondrial respiratory chain were studied in heart muscle preparation Both of them show the inhibitory effect on the succinate oxidase, ubiquinol oxidase, NADH oxidase but not the cytochrome c oxidase. These results indicate that the inhibitory sites of both compds. are located on the area of ubiquinone reactions. The substitution of -SR and -NHR at 5-position of the benzothiazole ring makes the two compds. of 2-Cl-DMMDBT and 2-Cl-BAMDBT show different behavior on the inhibition of NADH-Q reductase. The stronger inhibitory effect of 2-Cl-DMMDBT than 2-Cl-BAMDBT is probably due to the longer hydrophobic side chain of 2-Cl-DMMDBT, because the reactive sites of ubiquinone are all in the membrane of the mitochondria.
IT 174910-58-8
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(the inhibitory effect of dioxobenzothiazole analogs on the mitochondrial respiratory chain)
RN 174910-58-8 HCAPLUS
CN 4,7-Benzothiazoledione, 5-(butylamino)-2-chloro-6-methyl- (9CI) (CA INDEX NAME)



L4 ANSWER 22 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:723060 HCAPLUS
DOCUMENT NUMBER: 123:339849
TITLE: Synthesis of 5-substituted-2-chloro-6-methyl-4,7-dioxobenzothiazole derivatives
AUTHOR(S): Liu, Cui Hua; Lu, Bin; Zhang, Jing Ling
CORPORATE SOURCE: Inst. Org. Synthesis, Central China Normal Univ., Wuhan, 430070, Peop. Rep. China
SOURCE: Chinese Chemical Letters (1995), 6(6), 459-62
CODEN: CCLEE7
PUBLISHER: Chinese Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A series of 5-substituted-2-chloro-6-methyl-4,7-dioxobenzothiazole derivs. have been synthesized by interaction of 2-chloro-6-methyl-4,7-dioxobenzothiazole with alkylamines and alkyl mercaptans.
IT 170745-99-0P 170746-00-6P 170746-01-7P 170746-02-8P 170746-03-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of dioxobenzothiazole derivs.)
RN 170745-99-0 HCAPLUS
CN 4,7-Benzothiazoledione, 2-chloro-6-methyl-5-(pentylamino)- (9CI) (CA INDEX NAME)

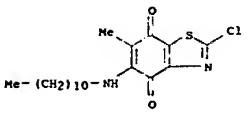


RN 170746-00-6 HCAPLUS
CN 4,7-Benzothiazoledione, 2-chloro-6-methyl-5-(octylamino)- (9CI) (CA INDEX NAME)

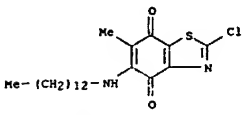


RN 170746-01-7 HCAPLUS
CN 4,7-Benzothiazoledione, 2-chloro-6-methyl-5-(undecylamino)- (9CI) (CA INDEX NAME)

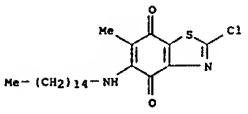
L4 ANSWER 22 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



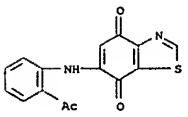
RN 170746-02-8 HCAPLUS
CN 4,7-Benzothiazoledione, 2-chloro-6-methyl-5-(tridecylamino)- (9CI) (CA INDEX NAME)



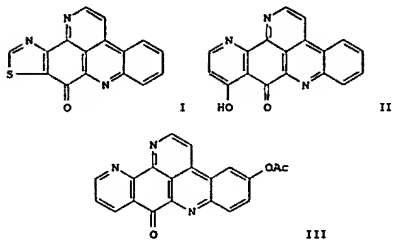
RN 170746-03-9 HCAPLUS
CN 4,7-Benzothiazoledione, 2-chloro-6-methyl-5-(pentadecylamino)- (9CI) (CA INDEX NAME)



L4 ANSWER 23 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



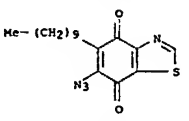
L4 ANSWER 23 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:581064 HCAPLUS
DOCUMENT NUMBER: 119:181064
TITLE: Total synthesis of kuanoniamine A, 11-hydroxyascididemin, and neocalliactine acetate
AUTHOR(S): Kitahara, Yoshiyasu; Nakahara, Shinsuke; Yonezawa, Takanobu; Nagatsu, Masanori; Kubo, Akinori
CORPORATE SOURCE: Meiji Coll. Pharm., Tokyo, 154, Japan
SOURCE: Heterocycles (1993), 36(5), 943-6
CODEN: HTCYAM; ISSN: 0385-5414
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 119:181064
GI



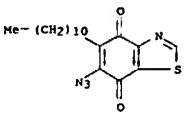
AB A pentacyclic aromatic alkaloid, kuanoniamine A (I) was synthesized from 6-methoxybenzothiazole-4,7-dione and 2-aminoacetophenone. Similarly, 11-hydroxyascididemin (II) was prepared from 6-bromo-4-chloro-5,8-dimethoxyquinoline. The structure of neocalliactine acetate, a derivative of calliactine, was determined as III by total synthesis from 6-methoxy-5,8-quinolinedione and 2-amino-5-methoxyacetophenone.
IT 150222-02-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and intramol. cyclization of)
RN 150222-02-9 HCAPLUS
CN 4,7-Benzothiazoledione, 6-[(2-acetylphenyl)amino]- (9CI) (CA INDEX NAME)

L4 ANSWER 24 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1989:110675 HCAPLUS
DOCUMENT NUMBER: 110:110675
TITLE: The nature of the inhibition of 4,7-dioxobenzothiazole derivatives on mitochondrial ubiquinol-cytochrome c reductase
AUTHOR(S): Yang, Fu De; Yu, Linda; Yu, Chang An
CORPORATE SOURCE: Dep. Biochem., Oklahoma State Univ., Stillwater, OK, 74078, USA
SOURCE: Journal of Biological Chemistry (1989), 264(2), 891-8
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To investigate the inhibitory action and binding site of a quinone-like mol., 5-undecyl-6-hydroxy-4,7-dioxobenzothiazole (UHDBT), a series of 4,7-dioxobenzothiazole derivs. were synthesized and their inhibitory efficiencies studied. Replacing the 6-OH or 2-H of UHDBT with a Br or a OMe group caused only a slight decrease in inhibitory efficiency, indicating that the 6-OH or the 2-H of UHDBT is not a structural requirement for inhibition. 5-Undecyl-6-bromo (or methoxy)-4,7-dioxobenzothiazole showed a pH-dependent inhibition similar to that observed with UHDBT, suggesting that the pH dependence is due to the presence of a dissociable group in the protein complex and not to the deprotonation of the OH group of the inhibitor. Replacing the 6-OH group with an azido group caused changes similar to those observed with UHDBT; the inhibition was accompanied by alteration of the EPR characteristics of reduced Fe-S protein in ubiquinol-cytochrome c reductase. The extent of inhibition was not changed upon illumination of the treated reductase. When the photolyzed, 6-azido-5-(1',2'-[3H]undecyl)-4,7-dioxobenzothiazole ([3H]6-azido-UDBT)-treated reductase was subjected to organic solvent extraction, no radioactivity was found in the reductase protein. Rather, the radioactivity was located in the phospholipid fraction. A [3H]azido-UDBT-cardiolipin adduct, identified after separation of the phospholipid fraction by HPLC, had 6-azido-UDBT linked to an acyl group, not to the head group of the cardiolipin mol. These results suggest that inhibition by UHDBT is due to perturbation of specific cardiolipin mols. in ubiquinol-cytochrome c reductase. Since UHDBT and 6-azido-UDBT also inhibit the ubiquinol-cytochrome c reductase activity of delipidated reductase (10% of the original lipid remaining) assayed after reconstitution with ubiquinone and phospholipid, and the [3H]azido-UDBT-cardiolipin adduct is also found in the delipidated reductase, the UHDBT-perturbed cardiolipin mol. is structurally indispensable to reductase and is tightly bound to the reductase protein, most likely the quinone-binding proteins.
IT 119401-23-9P, 6-Azido-5-decyl-4,7-dioxobenzothiazole
119401-24-0P, 6-Azido-5-undecyl-4,7-dioxobenzothiazole
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and ubiquinol-cytochrome c reductase inhibition by, structure in relation to)
RN 119401-23-9 HCAPLUS
CN 4,7-Benzothiazoledione, 6-azido-5-decyl- (9CI) (CA INDEX NAME)

L4 ANSWER 24 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 119401-24-0 HCAPLUS
CN 4,7-Benzothiazoledione, 6-azido-5-undecyl- (9CI) (CA INDEX NAME)



L4 ANSWER 25 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

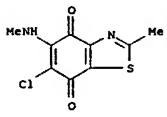
ACCESSION NUMBER: 1979:470013 HCAPLUS
DOCUMENT NUMBER: 91:70013
TITLE: Herbicidal compositions containing 1,4-quinones or derivatives thereof
INVENTOR(S): Entwistle, Ian David; Gilkerson, Terence; Devlin, Barry Roy John
PATENT ASSIGNEE(S): Shell Internationale Research Maatschappij B. V., Neth.
SOURCE: Brit., 12 pp.
CODEN: BRXXAA
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1534275	A	19781129	GB 1975-4104	19760130
PRIORITY APPLN. INFO.:			GB 1975-4104 A	19760130

AB Herbicidal 1,4-quinones and derivs. were prepared E.g., 2-methylamino-3-(3-methylureido)-1,4-naphthoquinone (I) [70820-05-2] was prepared by reaction of 3-amino-2-methylamino-1,4-naphthoquinone [13750-98-6] with Me isocyanate. A postemergence foliar spray of I (10 kg/ha) gave an approx. 55% reduction in fresh weight and leaf of sugar beet seedlings.

IT 70820-08-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(acetylation and amination of)

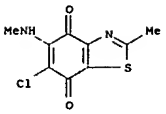
RN 70820-08-5 HCAPLUS
CN 4,7-Benzothiazoledione, 6-chloro-2-methyl-5-(methylamino)- (9CI) (CA INDEX NAME)



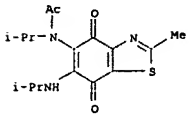
IT 70820-08-5P 70820-09-6P 70820-18-7P 70820-19-8P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and herbicidal activity of)

RN 70820-08-5 HCAPLUS
CN 4,7-Benzothiazoledione, 6-chloro-2-methyl-5-(methylamino)- (9CI) (CA INDEX NAME)

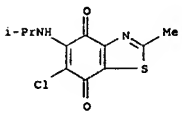
L4 ANSWER 25 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



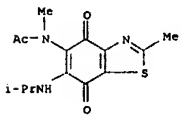
RN 70820-09-6 HCAPLUS
CN Acetamide, N-[4,7-dihydro-2-methyl-6-[(1-methylethyl)amino]-4,7-dioxo-5-benzothiazolyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 70820-18-7 HCAPLUS
CN 4,7-Benzothiazoledione, 6-chloro-2-methyl-5-[(1-methylethyl)amino]- (9CI) (CA INDEX NAME)



RN 70820-19-8 HCAPLUS
CN Acetamide, N-[4,7-dihydro-2-methyl-6-[(1-methylethyl)amino]-4,7-dioxo-5-benzothiazolyl]-N-methyl- (9CI) (CA INDEX NAME)



Andrew Freistein 10/500,411

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---Logging off of STN---

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Executing the logoff script...

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	108.98	276.13

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-12.00	-12.00

STN INTERNATIONAL LOGOFF AT 13:18:03 ON 26 JUN 2006